

Summary of Water Conditions

May 1, 2017

April was wet in the northern half of California but progressively drier in the south. The snowpack decreased at about the normal rate and remains at 180 percent of the May 1 average fairly close to the 2011 and 2006 amounts. Water year runoff in the Sacramento River region is forecast to exceed the 1983 record whereas the large San Joaquin region runoff is expected to be a bit less than in 1983. Overall, water year 1983 remains as California's wettest year.

Forecasts of median April through July and water year runoff have been increased significantly from those made one month ago. A new record is likely for the Sacramento River system water year, but the April through July volumes are expected to be somewhat less than several previous high years.

Snowpack water content is now about 180 percent of average for the date compared to 55 percent one year ago and about 15 percent less than the April 1 amount. Overall this year's May 1 pack is quite similar to snowpack water content in 2011 and 2006, and quite a bit less than 1983.

Precipitation overall during April was above average, but dry in the south. The wettest regions were the Sacramento and North Lahontan; some southern stations reported little or no rain. Seasonal precipitation from October through April this year is about 170 percent of average compared to 110 percent last year at this time.

Runoff so far this water year has been about 235 percent of average compared to 110 percent a year ago. Runoff in April was 200 percent of average. Estimated runoff of the eight major rivers of the Sacramento-San Joaquin River region was 6.94 million acre-feet in April.

Reservoir storage is about 110 percent of average compared to 90 percent one year ago. Many large Sierra foothill reservoirs are being held down now in anticipation of large snowmelt runoff to come.

SUMMARY OF WATER CONDITIONS IN PERCENT OF AVERAGE

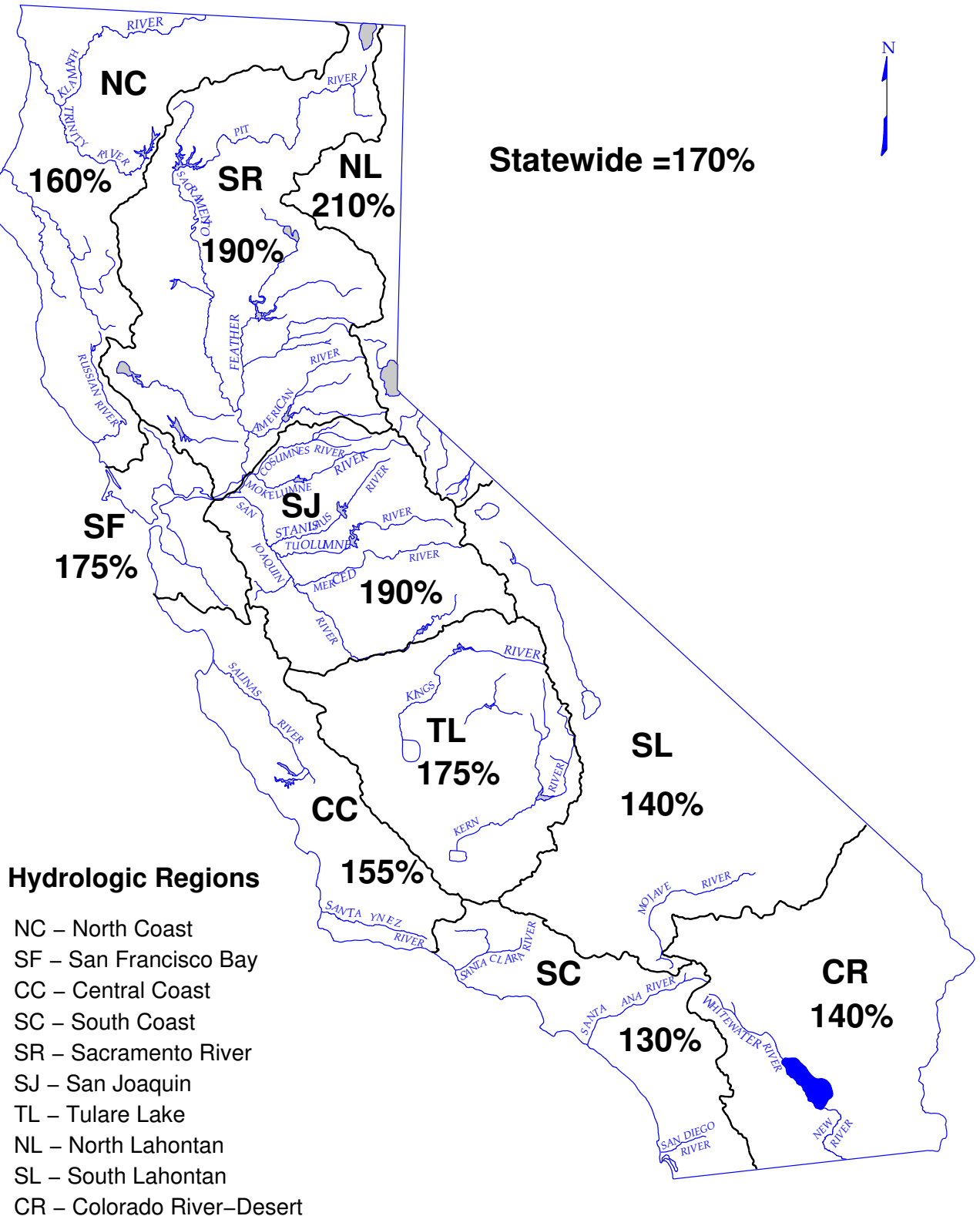
HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	May 1 SNOW WATER CONTENT	May 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	160	160	115	200	155	180
SAN FRANCISCO BAY	175	--	100	215	--	--
CENTRAL COAST	155	--	100	250	--	--
SOUTH COAST	130	--	90	80	--	--
SACRAMENTO RIVER	190	170	110	240	200	225
SAN JOAQUIN RIVER	190	190	120	305	205	250
TULARE LAKE	175	200	100	265	205	225
NORTH LAHONTAN	210	160	140	325	250	275
SOUTH LAHONTAN	140	205	85	110	205	170
COLORADO RIVER-DESERT	140	--	--	--	--	--
STATEWIDE	170	180	110	235	200	230

DEPARTMENT OF WATER RESOURCES

CALIFORNIA COOPERATIVE SNOW SURVEYS

SEASONAL PRECIPITATION

IN PERCENT OF AVERAGE TO DATE
October 1, 2016 through April 30, 2017



WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

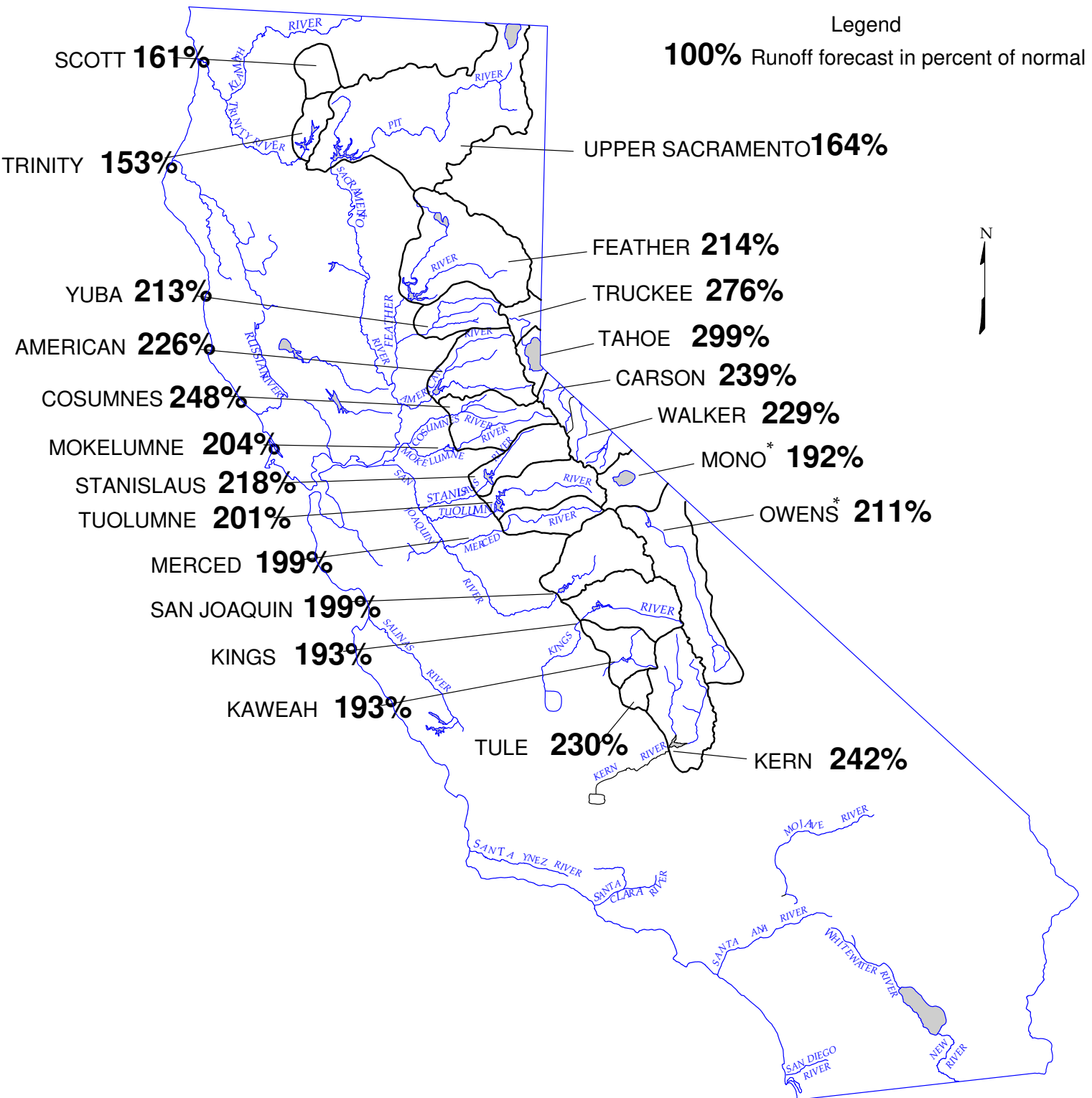
DEPARTMENT OF WATER RESOURCES

CALIFORNIA COOPERATIVE SNOW SURVEYS

FORECAST OF APRIL – JULY

UNIMPAIRED SNOWMELT RUNOFF

May 1, 2017



MAY 1, 2017 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1)					
	HISTORICAL			FORECAST		
	50 Yr Avg (2)	Max of Record	Min of Record (11)	Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
North Coast						
Trinity River at Lewiston Lake	639	1,593	80	980	153%	880 - 1,140
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake	295	751	39	450	153%	
McCloud River above Shasta Lake	385	850	185	590	153%	
Pit River near Montgomery Creek + Squaw Creek	1,020	2,098	480	1,530	150%	
Total Inflow to Shasta Lake	1,756	3,525	711	2,880	164%	2,650 - 3,280
Sacramento River above Bend Bridge, near Red Bluff	2,421	5,117	943	4,030	166%	3,730 - 4,560
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	720	216%	
North Fork at Pulga (3)	1,028	2,416	243	2,200	214%	
Middle Fork near Clio (4)	86	518	4	185	215%	
South Fork at Ponderosa Dam (3)	110	267	13	235	214%	
Feather River at Oroville	1,704	4,676	378	3,640	214%	3,370 - 4,050
Yuba River						
North Yuba below Goodyears Bar	279	647	51	590	211%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	240	214%	
South Yuba at Langs Crossing (3)	233	481	57	490	210%	
Yuba River near Smartsville plus Deer Creek	968	2,424	151	2,060	213%	1,920 - 2,210
American River						
North Fork at North Fork Dam (3)	262	716	43	590	225%	
Middle Fork near Auburn (3)	522	1,406	100	1,180	226%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	390	225%	
American River below Folsom Lake	1,199	3,074	185	2,710	226%	2,540 - 2,910
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	125	446	8	310	248%	275 - 360
Mokelumne River						
North Fork near West Point (5)	437	829	104	880	201%	
Total Inflow to Pardee Reservoir	457	1,076	75	930	204%	870 - 1,000
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	710	213%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	490	219%	
Stanislaus River below Goodwin Reservoir (9)	682	1,710	116	1,490	218%	1,370 - 1,660
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	620	197%	
Tuolumne River near Hetch Hetchy	604	1,392	153	1,200	199%	
Tuolumne River below La Grange Reservoir (9)	1,193	2,682	301	2,400	201%	2,230 - 2,660
Merced River						
Merced River at Pohono Bridge	372	888	80	730	196%	
Merced River below Merced Falls (9)	623	1,587	104	1,240	199%	1,140 - 1,380
San Joaquin River						
San Joaquin River at Mammoth Pool (7)	1,026	2,279	235	2,010	196%	
Big Creek below Huntington Lake (8)	91	264	11	180	198%	
South Fork near Florence Lake (7)	201	511	58	390	194%	
San Joaquin River inflow to Millerton Lake	1,228	3,355	193	2,440	199%	2,250 - 2,710
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	460	192%	
Kings River below Pine Flat Reservoir	1,210	3,113	208	2,330	193%	2,180 - 2,530
Kaweah River below Terminus Reservoir	285	814	42	550	193%	500 - 620
Tule River below Lake Success	63	259	1	145	230%	130 - 175
Kern River						
Kern River near Kernville	384	1,203	83	910	237%	
Kern River inflow to Lake Isabella	458	1,657	57	1,110	242%	1,030 - 1,230

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1966-2015 unless otherwise noted

(3) 50 year average based on years 1941-90

(4) 44 year average based on years 1936-79

(5) 36 year average based on years 1936-72

(6) 45 year average based on years 1936-81

(7) 50 year average based on years 1953-2002

(8) 50 year average based on years 1946-1995

MAY 1, 2017 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

HISTORICAL			Unimpaired Runoff in 1,000 Acre-Feet (1)									FORECAST		
50 Yr Avg (2)	Max of Record	Min of Record (11)	Oct Thru Jan	Feb *	Mar *	Apr *	May	Jun	Jul	Aug	Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)
1348	2990	200	608	483	338	273	395	245	67	19	12	2,440	181%	2,335 - 2,605
860	1,965	165												
1,183	2,353	557												
3,002	5,150	1,484												
5,831	10,796	2,479	2,948	2,713	1,251	1,257	840	490	293	248	235	10,275	176%	9,985 - 10,795
8,544	17,180	3,294	4,917	3,883	1,811	1,737	1,160	705	428	330	324	15,295	179%	14,900 - 15,965
780	1,269	366												
2,417	4,400	666												
219	637	24												
291	562	32												
4,407	9,492	994	2,756	2,920	1,216	1,513	1,220	660	247	143	115	10,790	245%	10,465 - 11,290
564	1,056	102												
181	292	30												
379	565	98												
2,268	4,926	369	1,838	1,494	517	712	720	515	113	41	30	5,980	264%	5,815 - 6,175
616	1,234	66												
1,070	2,575	144												
318	705	59												
2,626	6,382	349	2,384	1,950	694	894	940	695	181	45	27	7,810	297%	7,615 - 8,050
379	1,253	20	415	433	132	141	110	45	14	3	2	1,295	342%	1,255 - 1,350
626	1,009	197												
748	1,848	129	424	408	176	223	340	284	83	14	8	1,960	262%	1,890 - 2,040
471	929	88												
1,149	2,952	155	669	627	275	398	520	440	132	33	16	3,110	271%	2,980 - 3,295
461	1,147	123												
770	1,661	258												
1,909	4,631	383	1,048	829	400	526	750	760	364	78	25	4,780	250%	4,595 - 5,070
461	1,020	92												
992	2,787	150	512	487	223	275	415	405	145	38	15	2,515	254%	2,405 - 2,670
1,337	2,964	308												
112	298	14												
248	653	71												
1,793	4,642	327	700	530	355	516	725	790	409	128	42	4,195	234%	3,985 - 4,505
284	607	58												
1,702	4,287	359	480	384	280	464	700	765	401	115	41	3,630	213%	3,470 - 3,850
451	1,402	89	158	163	101	134	180	170	66	17	6	995	221%	940 - 1,070
147	615	10	98	106	53	44	61	30	10	2	1	405	276%	385 - 440
558	1,577	163												
728	2,318	130	184	228	180	279	340	305	186	70	38	1,810	249%	1,720 - 1,950

(9) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.

(10) Coordinated Forecast by National Weather Service California-Nevada River Forecast Center and Department of Water Resources, State of California

(11) For the tributaries, the period of record over which the minimum values are found does not include years after water year 2011.

* Unimpaired runoff in months prior to forecast date are based on measured flows

**MAY 1, 2017 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF**

HYDROLOGIC REGION and Watershed	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1)				
	HISTORICAL			FORECAST	
	50 Yr Avg (2)	Max of Record	Min of Record	Apr-Jul Forecasts	Pct of Avg
NORTH COAST					
Scott River					
Scott River nr Ft Jones (3)	173	398	22	279	161%
Klamath River					
Total inflow to Upper Klamath Lake (4)	475	1,150	149	622	131%
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	250	713	48	690	276%
Lake Tahoe Rise (assuming gates closed, ft)	1.3	5.4	0.2	4.0	299%
Carson River					
West Fork Carson River at Woodfords	52	135	10	120	231%
East Fork Carson River near Gardnerville	182	407	43	440	242%
Walker River					
West Walker River below Little Walker, near Coleville	153	330	35	310	203%
East Walker River near Bridgeport	61	209	7	180	295%
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (5)	231	579	84	489	211%

(1) See inside back cover for definition

(2) All 50 year averages are based on years 1966-2015 unless otherwise noted

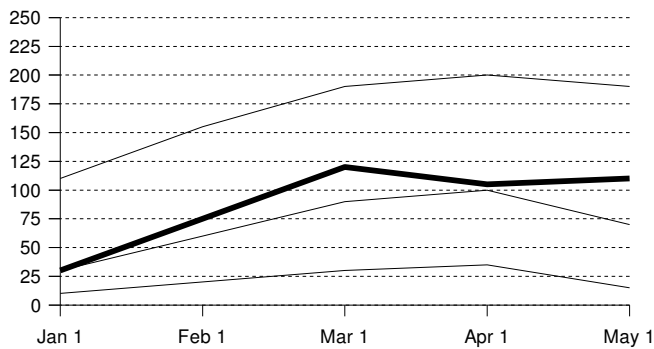
(3) Forecast by National Weather Service California-Nevada River Forecast Center. 30 yr average (1981-2010)

(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1981-2010.

(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1965-2015

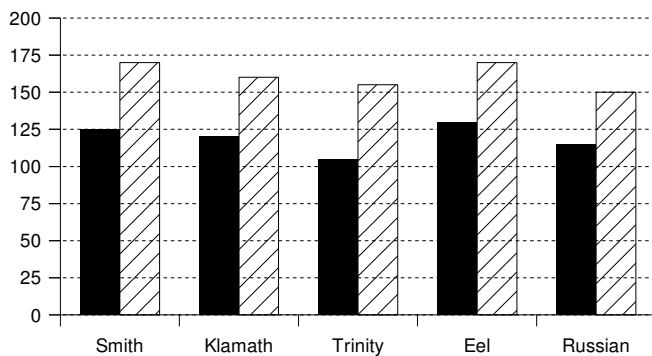
Snowpack Accumulation

Water Content in % of April 1 Average



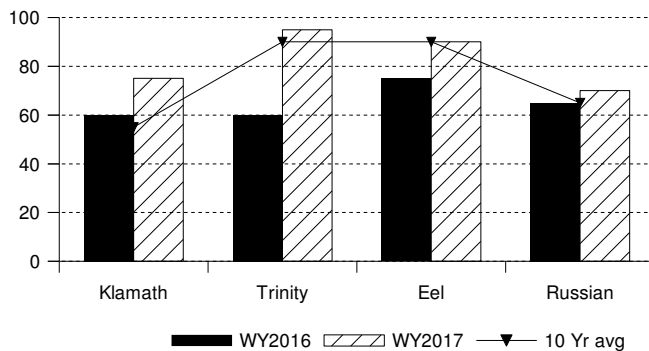
Precipitation

October 1 to date in % of Average



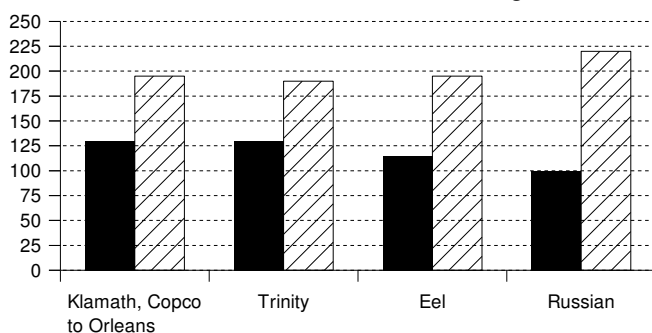
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH COAST REGION

SNOWPACK- First of the month measurements made at 9 snow courses indicate an area wide snow water equivalent of less than 39.1 inch. This is 110 percent of the seasonal April 1 average and 160 percent of the May 1 average. Last year at this time the pack was holding less than 15.1 inch of water.

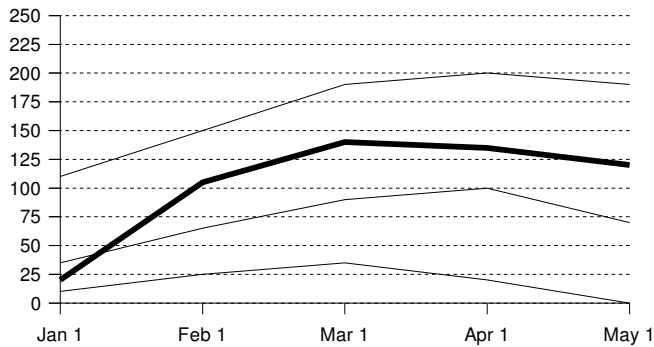
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 160 percent of normal. Precipitation last month was about 185 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal.

RESERVOIR STORAGE- First of the month storage in 6 reservoirs was 2.8 million acre-feet which is 115 percent of average. About 90 percent of available capacity was being used. Storage in these reservoirs at this time last year was 80 percent of average.

RUNOFF -Seasonal runoff of streams draining the area totaled 20.8 million acre-feet which is 200 percent of the average for this period. Last year, runoff for the same period was 120 percent of average.

SACRAMENTO RIVER REGION

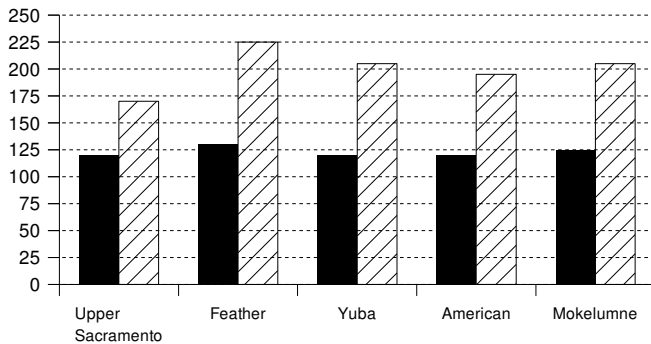
Snowpack Accumulation Water Content in % of April 1 Average



SNOWPACK- First of the month measurements made at 65 snow courses indicate an area wide snow water equivalent of 40.9 inches. This is 120 percent of the seasonal April 1 average and 170 percent of the May 1 average. Last year at this time the pack was holding 14.6 inches of water.

Precipitation

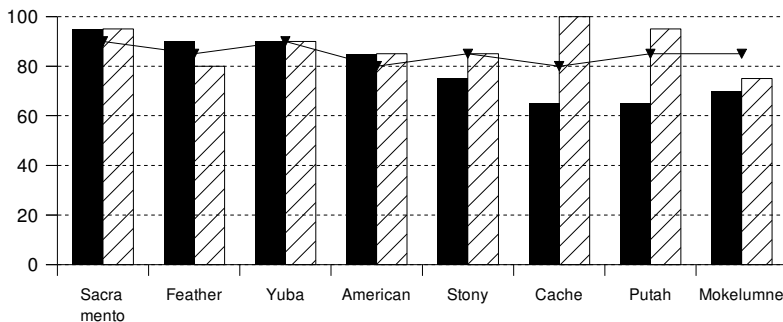
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 190 percent of normal. Precipitation last month was about 220 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal.

Reservoir Storage

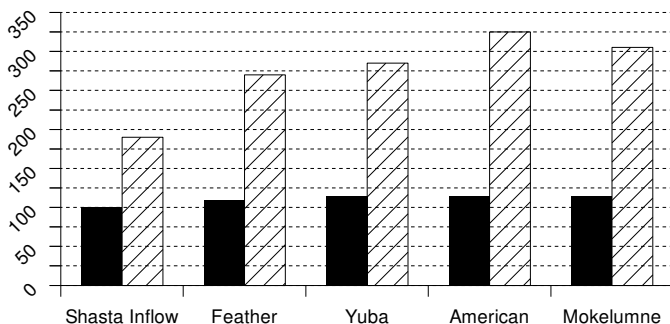
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 14.1 million acre-feet which is 110 percent of average. About 85 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

Runoff

October 1 to date in % of average



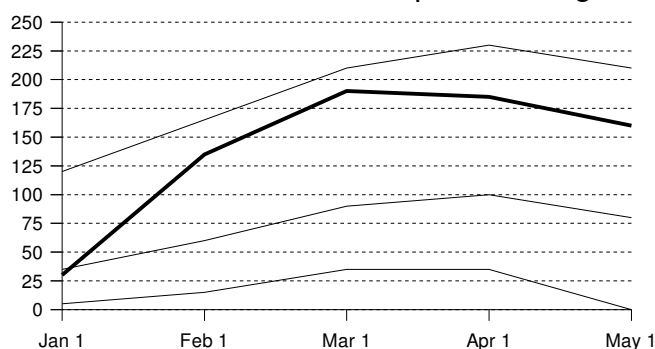
RUNOFF - Seasonal runoff of streams draining the area totaled 31.2 million acre-feet which is 240 percent of average for this period. Last year, runoff for the same period was 105 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 14.9 assuming median meteorological conditions for the remainder of the year. This classifies the year as "wet" in the Sacramento Valley according to the State Water Resources Control Board.

SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

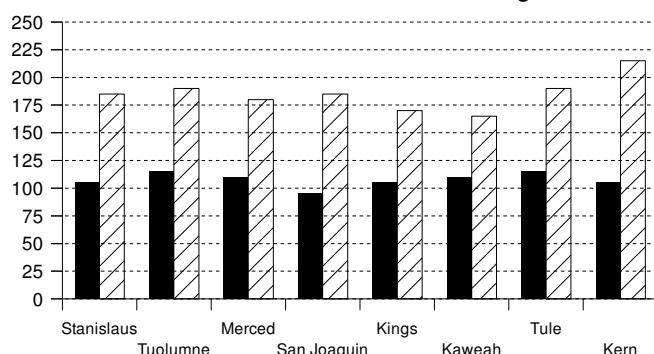
Snowpack Accumulation

Water Content in % of April 1 Average



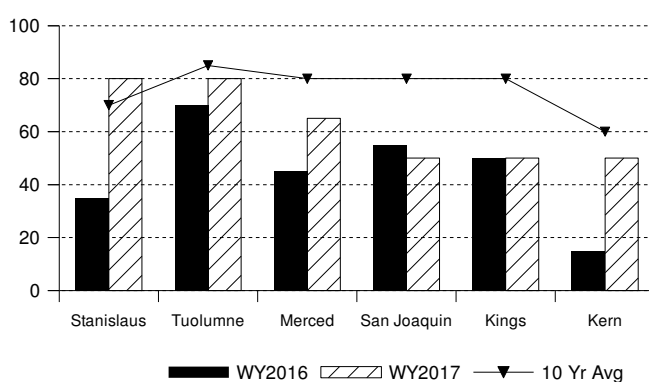
Precipitation

October 1 to date in % of Average

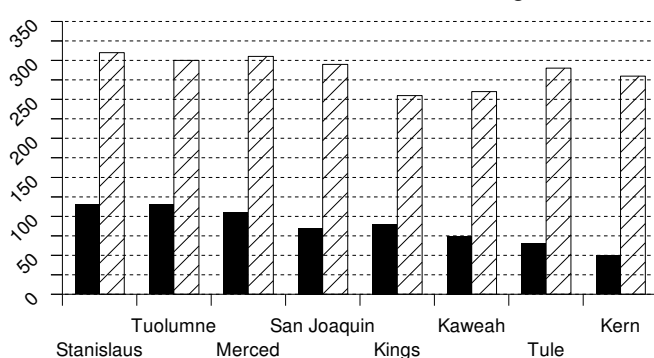


Reservoir Storage

Contents of major reservoirs in % of capacity



October 1 to date in % of average



SNOWPACK- First of the month measurements made at 55 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 53.6 inches. This is 160 percent of the seasonal (April 1) average and 190 percent of the May 1 average. Last year at this time the pack was holding less than 18.6 inch of water. At the same time 42 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 41.2 inches which is 155 percent of the average for April 1 and 200 percent of May 1. Last year at this time the basin was holding less than 11.4 inch of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 185 percent of normal. Precipitation last month was about 155 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 175 percent of normal. Precipitation last month was about 110 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

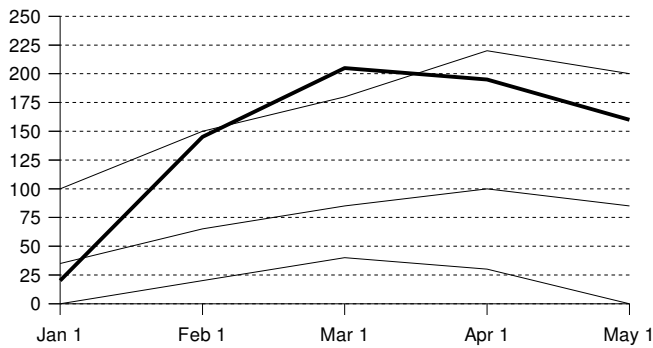
RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 9.1 million acre-feet which is 120 percent of average. About 80 percent of available capacity was being used. Storage in these reservoirs at this time last year was 75 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 1 million acre-feet which is 100 percent of average and about 50 percent of available capacity. Storage in these reservoirs at this time last year was 85 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 10.7 million acre-feet which is 305 percent of average for this period. Last year, runoff for the same period was 105 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 3.4 million acre-feet which is 265 percent of average for this period. Last year runoff for this same period was 75 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 6.2 assuming 75 percent of median meteorological conditions. This classifies the year as "wet" in the San Joaquin River Region according to the State Water Resources Control Board.

NORTH AND SOUTH LAHONTAN REGIONS

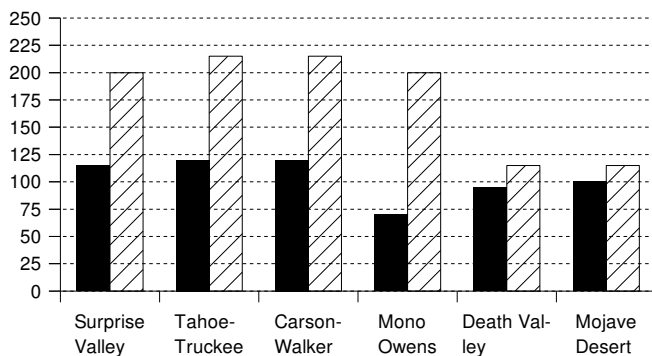
Snowpack Accumulation

Water Content in % of April 1 Average



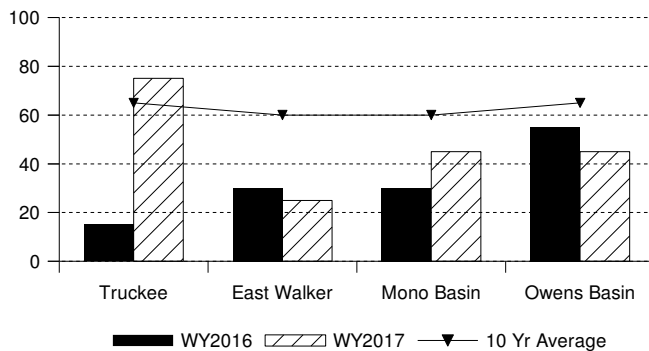
Precipitation

October 1 to date in % of Average



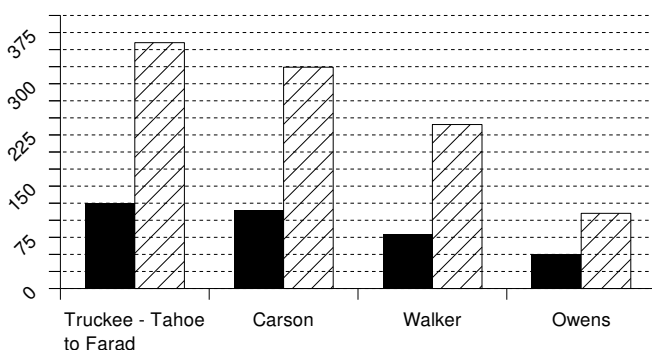
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SNOWPACK- First of the month measurements made at 5 **North Lahontan Region** snow courses indicate an area wide snow water equivalent of 34.4 inches. This is 140 percent of the seasonal (April 1) average and 160 percent of the May 1 average. Last year at this time the pack was holding less than 11 inch of water. At the same time 7 **South Lahontan** snow courses indicated a basin-wide snow water equivalent of 27.6 inches which is 180 percent of the seasonal (April 1) average and 205 percent of the May 1 average. Last year at this time the basin was holding 9 inches of water.

PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan Region** was 210 percent of normal. Precipitation last month was about 285 percent of the monthly average. Seasonal precipitation at this time last year stood at 120 percent of normal. Seasonal precipitation on the **South Lahontan** was 140 percent of normal. Precipitation last month was 65 percent of the monthly average. Seasonal precipitation at this time last year stood at 85 percent of normal.

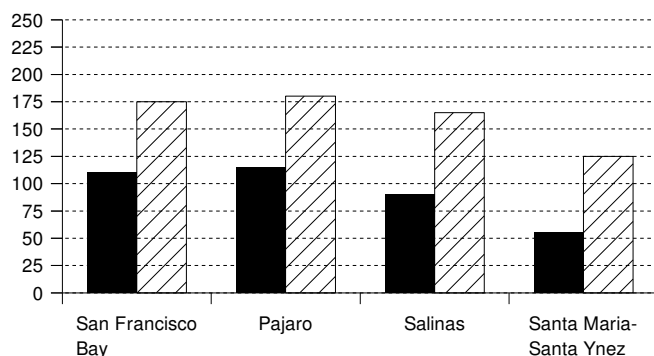
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 803 thousand acre-feet which is 140 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 30 percent of average. Lake Tahoe was 5 feet above its natural rim on May 1. First of the month storage in 8 **South Lahontan** reservoirs was 222 thousand acre-feet which is 85 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 90 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 1.3 million acre-feet which is 325 percent of average for this period. Last year, runoff for the same period was 110 percent of average. Seasonal runoff of the Owens River in the **South Lahontan** totaled 82 thousand acre-feet which is 110 percent of average for this period. Last year runoff for this same period was 50 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS

Precipitation

October 1 to date in % of Average

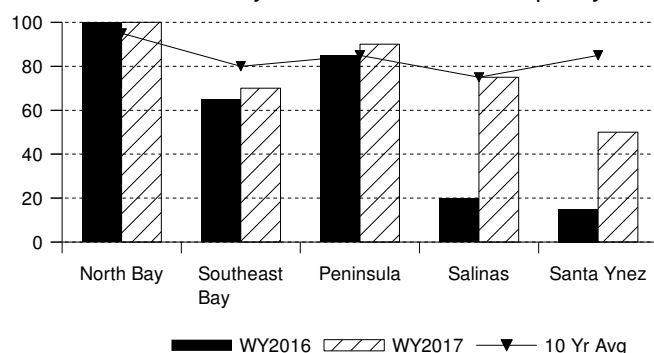


PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 175 percent of normal. Precipitation last month was about 130 percent of the monthly average. Seasonal precipitation at this time last year stood at 110 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 155 percent of normal. Precipitation last month was about 80 percent of the monthly average. Seasonal precipitation at this time last year stood at 90 percent of normal.

Reservoir Storage

Contents of major reservoirs in % of capacity

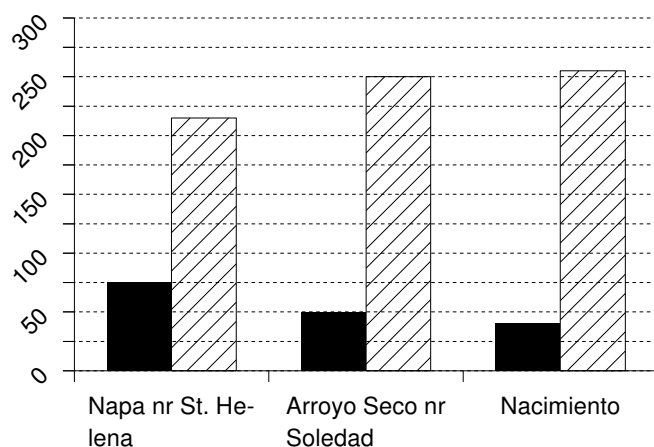


RESERVOIR STORAGE- First of the month storage in 17 **San Francisco Bay Region** reservoirs was 525 thousand acre-feet which is 100 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 95 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 686 thousand acre-feet which is 100 percent of average and about 70 percent of available capacity. Storage in these reservoirs at this time last year was 30 percent of average.

Runoff

October 1 to date in % of average



RUNOFF- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 150 thousand acre-feet which is 215 percent of average for this period. Last year, runoff for the same period was 75 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 767 thousand acre-feet which is 250 percent of average for this period. Last year runoff for this same period was 45 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through April (seasonal) precipitation on the **South Coast Region** was 130 percent of normal. April precipitation was 10 percent of the monthly average. Seasonal precipitation at this time last year was 55 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 140 percent of normal. Precipitation during April was 0 percent of average. Seasonal precipitation at this time last year stood at 75 percent of average.

RESERVOIR STORAGE - May 1 storage in 29 major **South Coast Region** reservoirs was 1.4 million acre-feet or 90 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 70 percent of average.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 118 thousand acre-feet which is 80 percent of average. Seasonal runoff from these streams last year was 20 percent of average.

COLORADO RIVER

The April July inflow to Lake Powell is forecast to be 8.8 million acre-feet, which is 123 percent of average. The May 1 snowpack in the Colorado River basin above Lake Powell was 110 percent of average, lowest in the Muddy/Fremont/Escalante at 30 percent and highest in the Upper Green at 165 percent. On May 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 24.8 million acre-feet or about 65 percent of average. About 45 percent of available capacity was in use. Last year at this time, these reservoirs were storing 60 percent of average.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	2016 1,000 AF	STORAGE AT END OF April 2017 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
<i>STATE WATER PROJECT</i>						
Lake Oroville	3,538	2,857	3,400	2,622	92%	74%
San Luis Reservoir (SWP)	1,062	937	556	1,032	110%	97%
Lake Del Valle	77	39	40	41	104%	53%
Lake Silverwood	78	69	66	66	95%	84%
Pyramid Lake	180	163	162	166	101%	92%
Castaic Lake	325	288	178	301	104%	93%
Perris Lake	131	105	47	58	55%	44%
<i>CENTRAL VALLEY PROJECT</i>						
Trinity Lake	2,448	1,984	1,494	2,302	116%	94%
Lake Shasta	4,552	3,872	4,233	4,263	110%	94%
Whiskeytown Lake	241	233	237	232	100%	96%
Folsom Lake	977	727	826	724	100%	74%
New Melones Reservoir	2,400	1,483	622	2,002	135%	83%
Millerton Lake	520	358	295	261	73%	50%
San Luis Reservoir (CVP)	971	839	401	966	115%	100%
<i>COLORADO RIVER PROJECT</i>						
Lake Mead	26,159	18,823	9,693	10,420	55%	40%
Lake Powell	24,322	16,854	11,014	12,149	72%	50%
Lake Mohave	1,810	1,670	1,746	1,684	101%	93%
Lake Havasu	648	587	597	594	101%	92%
<i>EAST BAY MUNICIPAL UTILITY DISTRICT</i>						
Pardee Res	204	184	180	200	109%	98%
Camanche Reservoir	417	265	240	283	107%	68%
East Bay (4 res.)	159	134	135	134	100%	84%
<i>CITY AND COUNTY OF SAN FRANCISCO</i>						
Hetch-Hetchy Reservoir	360	189	281	283	149%	79%
Cherry Lake	268	176	181	183	104%	68%
Lake Eleanor	29	17	22	24	140%	84%
South Bay/Peninsula (4 res.)	238	173	156	152	88%	64%
<i>CITY OF LOS ANGELES (D.W.P.)</i>						
Lake Crowley	183	124	111	93	75%	50%
Grant Lake	48	26	17	33	126%	70%
Other Aqueduct Storage (6 res.)	95	75	66	61	81%	64%

TELEMETERED SNOW WATER EQUIVALENTS

May 1, 2017

(AVERAGES BASED ON PERIOD RECORD)

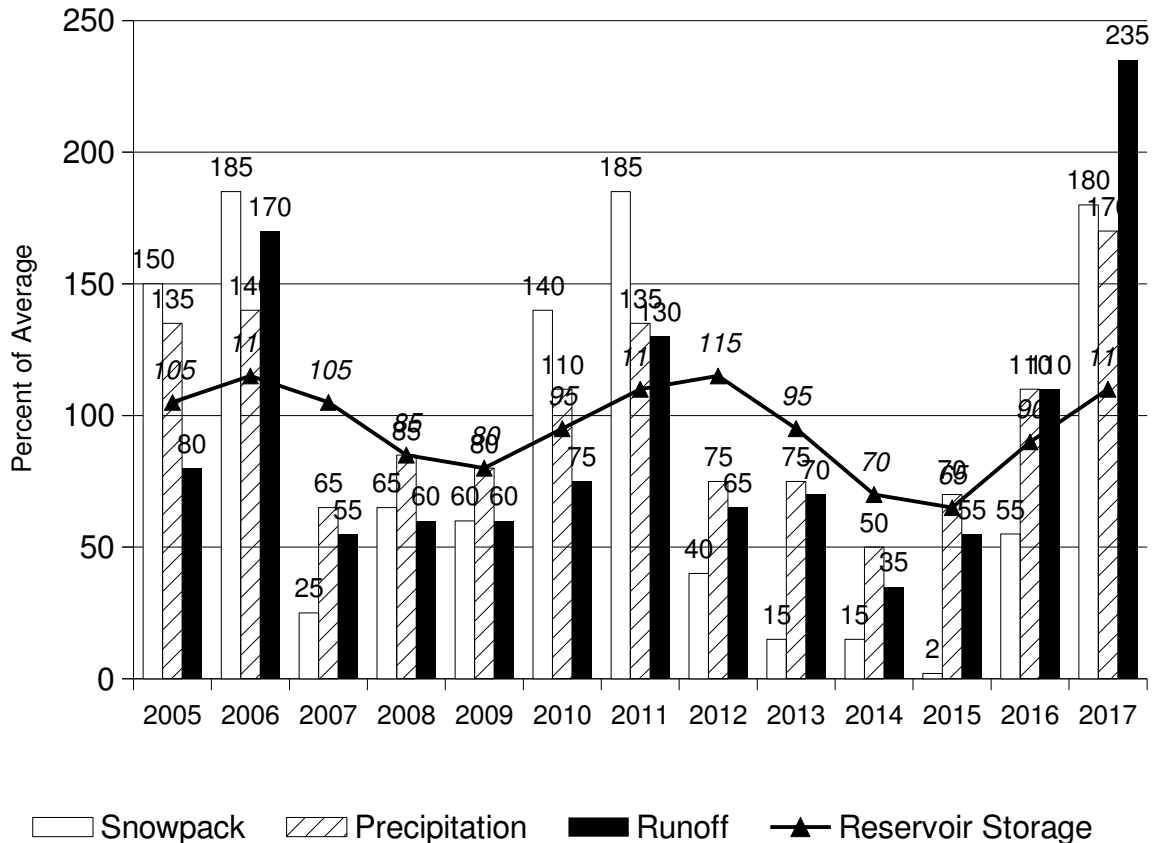
		INCHES OF WATER EQUIVALENT				
BASIN NAME		APRIL 1	PERCENT	24 HRS	1 WEEK	
STATION NAME	ELEV	AVERAGE	May 1 OF AVERAGE	PREVIOUS	PREVIOUS	
TRINITY RIVER						
Peterson Flat	7150'	29.2	49.2	168.4	50.1	52.3
Red Rock Mountain	6700'	39.6	70.3	177.5	71.8	76.2
Bonanza King	6450'	40.5	—	—	—	—
Shimmy Lake	6400'	40.3	—	—	—	—
Middle Boulder 3	6200'	28.3	—	—	—	—
Highland Lakes	6030'	29.9	—	—	—	30.7
Scott Mountain	5900'	16.0	17.5	109.4	18.5	21.0
Mumbo Basin	5650'	22.4	27.1	121.1	28.2	31.6
Big Flat	5100'	15.8	18.8	119.2	19.7	22.3
Crowder Flat	5100'	—	0.0	—	0.0	0.0
SACRAMENTO RIVER						
Cedar Pass	7100'	18.1	18.7	103.3	19.5	18.8
Blacks Mountain	7050'	12.7	10.9	86.0	11.8	13.7
Sand Flat	6750'	42.4	54.1	127.6	54.5	55.1
Medicine Lake	6700'	32.6	45.6	139.8	46.7	48.0
Adin Mountain	6200'	13.6	9.4	69.1	10.1	12.7
Snow Mountain	5950'	27.0	44.2	163.6	45.2	47.8
Slate Creek	5700'	29.0	34.2	117.9	36.7	41.5
Stouts Meadow	5400'	36.0	38.3	106.3	39.0	42.2
FEATHER RIVER						
Lower Lassen Peak	8250'	—	—	—	—	—
Kettle Rock	7300'	25.5	43.9	172.2	44.6	46.1
Grizzly Ridge	6900'	29.7	39.6	133.3	40.1	41.6
Pilot Peak	6800'	52.6	68.8	130.8	70.2	73.2
Gold Lake	6750'	36.5	68.0	186.2	68.6	69.6
Humbog	6500'	28.0	—	—	—	—
Harkness Flat	6200'	28.5	22.9	80.4	24.1	27.3
Rattlesnake	6100'	14.0	19.6	139.7	20.9	25.7
Bucks Lake	5750'	44.7	52.1	116.5	52.7	54.5
Four Trees	5150'	20.0	—	—	—	—
EEL RIVER						
Hull Mountain	6461'	—	—	—	—	—
Noel Spring	5100'	—	0.0	—	0.0	0.0
YUBA & AMERICAN RIVERS						
Schneiders	8750'	34.5	83.4	241.7	83.4	83.8
Lake Lois	8600'	39.5	—	—	—	—
Carson Pass	8353'	—	56.4	—	57.9	60.2
Caples Lake	8000'	30.9	54.1	175.1	54.4	56.2
Alpha	7600'	35.9	50.2	139.7	51.0	53.5
Forni Ridge	7600'	37.0	60.8	164.2	62.8	66.0
Meadow Lake	7200'	55.5	—	—	—	—
Silver Lake	7100'	22.7	32.2	141.7	33.2	37.2
Central Sierra Snow Lab	6900'	33.6	62.7	186.6	63.7	67.5
Van Vleck	6700'	35.9	54.8	152.6	56.4	60.3
Huysink	6600'	42.6	49.4	116.1	49.9	51.5
Robinson Cow Camp	6480'	—	63.4	—	64.5	65.8
Robbs Saddle	5900'	21.4	13.0	60.9	14.3	18.4
Greek Store	5600'	21.0	19.8	94.3	21.5	25.0
Blue Canyon	5280'	9.0	0.0	0.0	0.0	2.8
Robbs Powerhouse	5150'	5.2	0.0	0.0	0.0	0.0
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250'	37.2	68.9	185.2	69.1	69.7
Highland Meadow	8700'	47.9	97.3	203.2	98.3	99.5
Gianelli Meadow	8400'	55.5	77.0	138.8	77.5	77.8
Lower Relief Valley	8100'	41.2	—	—	—	—
Blue Lakes	8000'	33.1	60.0	181.3	60.4	62.0
Stanislaus Meadow	7750'	47.5	79.2	166.7	80.6	83.6
Bloods Creek	7200'	35.5	38.2	107.5	39.2	41.8
Black Springs	6500'	32.0	31.3	97.9	32.6	34.4
TUOLUMNE & MERCED RIVERS						
Dana Meadows	9800'	27.7	48.0	173.3	49.0	52.2
Slide Canyon	9200'	41.1	90.6	220.4	91.0	91.9
Tuolumne Meadows	8600'	22.6	39.1	172.8	40.3	44.0
Horse Meadow	8400'	48.6	101.0	207.9	102.5	105.2
Ostrander Lake	8200'	34.8	—	—	—	—
Lake Tenaya	8150'	33.1	57.0	172.2	58.0	62.9
White Wolf	7900'	—	46.3	—	47.7	50.9
Paradise Meadow	7650'	41.3	—	—	—	—
Lower Kibbie Ridge	6700'	27.4	13.2	48.1	14.3	18.1

SAN JOAQUIN RIVER						
Volcanic Knob	10050'	30.1	56.0	185.9	57.0	59.1
Kaiser Point	9200'	37.8	68.8	181.9	69.1	71.5
Green Mountain	7900'	30.8	47.4	153.9	48.8	55.6
Devil's Postpile	7569'	—	19.5	—	20.3	22.5
Tamarack Summit	7550'	30.5	28.3	92.9	30.1	36.1
Chilkoot Meadow	7150'	38.0	39.6	104.2	40.8	43.3
Huntington Lake	7000'	20.1	14.0	69.9	15.4	19.9
Graveyard Meadow	6900'	18.8	—	—	—	—
Poison Ridge	6900'	28.9	11.5	39.9	13.7	20.0
KINGS RIVER						
Bishop Pass	11200'	34.0	31.3	92.1	32.5	36.4
Charlotte Lake	10400'	27.5	—	—	—	—
State Lakes	10300'	29.0	69.6	240.1	69.8	70.7
Mitchell Meadow	9900'	32.9	64.3	195.6	64.3	64.1
Upper Burnt Corral	9700'	34.6	63.2	182.6	64.0	68.7
West Woodchuck Meadow	9100'	32.8	60.2	183.5	60.1	63.0
Big Meadows	7600'	25.9	17.8	68.6	19.0	24.5
KAWEAH & TULE RIVERS						
Quaking Aspen	7200'	21.0	4.6	21.7	5.9	12.2
Giant Forest	6650'	10.0	0.0	0.0	0.0	0.0
KERN RIVER						
Upper Tyndall Creek	11400'	27.7	—	—	—	—
Chagoopa Plateau	10300'	21.8	46.7	214.1	46.7	52.2
Pascoes	9150'	24.9	42.8	171.9	43.7	49.7
Wet Meadows	8950'	30.3	—	—	—	—
Tunnel Guard Station	8900'	15.6	1.0	6.5	2.0	10.4
Beach Meadows	7650'	11.0	0.0	0.0	0.0	0.5
SURPRISE VALLEY AREA						
Dismal Swamp	7050'	29.2	50.9	174.3	50.8	49.2
TRUCKEE RIVER						
Big Meadows	8700'	25.7	47.2	183.7	48.2	51.5
Independence Lake	8450'	41.4	86.8	209.6	86.4	86.2
Squaw Valley	8200'	46.5	77.6	166.9	78.8	81.3
Independence Camp	7000'	21.8	19.1	87.6	20.0	23.0
Independence Creek	6500'	12.7	4.3	33.9	5.3	9.5
Truckee 2	6400'	14.3	20.9	146.2	22.3	27.0
LAKE TAHOE BASIN						
Mount Rose Ski Area	8900'	38.5	—	—	—	93.7
Heavenly Valley	8800'	28.1	55.1	196.1	54.8	57.2
Hagans Meadow	8000'	16.5	28.1	170.3	28.9	33.0
Marlette Lake	8000'	21.1	43.6	206.6	45.4	48.2
Echo Peak 5	7800'	39.5	70.7	179.0	71.5	75.4
Rubicon Peak 2	7500'	29.1	56.0	192.4	56.0	57.9
Tahoe City Cross	6750'	16.0	6.6	41.2	7.9	12.3
Ward Creek 3	6750'	39.4	55.6	141.1	57.1	62.1
Fallen Leaf Lake	6250'	7.0	0.0	0.0	0.0	0.0
CARSON RIVER						
Ebbetts Pass	8700'	38.8	79.1	203.9	79.4	81.2
Horse Meadow	8557'	—	46.2	—	46.3	46.3
Monitor Pass	8350'	—	29.2	—	30.3	33.5
Burnside Lake	8129'	—	27.9	—	29.6	43.0
Forestdale Creek	8017'	—	46.6	—	45.8	49.1
Poison Flat	7900'	16.2	39.5	243.8	40.6	44.6
Spratt Creek	6150'	4.5	0.0	0.0	0.0	0.0
WALKER RIVER						
Leavitt Lake	9600'	—	120.8	—	120.7	123.2
Summit Meadow	9313'	—	54.4	—	54.3	56.6
Virginia Lakes	9300'	20.3	36.7	180.8	37.0	39.4
Lobdell Lake	9200'	17.3	34.0	196.5	34.9	38.6
Sonora Pass Bridge	8750'	26.0	53.4	205.4	52.8	55.0
Leavitt Meadows	7200'	8.0	0.0	0.0	0.0	6.7
OWENS RIVER/MONO LAKE						
Gem Pass	10750'	31.7	48.7	153.7	48.6	49.6
Sawmill	10200'	19.4	33.7	173.8	34.7	33.7
Cottonwood Lakes	10150'	11.6	—	—	—	—
Big Pine Creek	9800'	17.9	41.9	234.0	41.8	45.3
Rock Creek Lakes	9700'	14.0	—	—	—	—
South Lake	9600'	16.0	30.7	192.0	31.4	34.7
Mammoth Pass	9300'	42.4	79.8	188.2	80.3	80.9

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Central Valley North	45%	70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%

May 1 Statewide Conditions



SNOWLINES It is with deep regret I note the passing of Fred A Strauss. Fred joined the then Division of Public Works in the Snow Surveys program in 1947 under the leadership of Fred Paget. It was a time of rapid expansion of the snow surveys program with the addition of additional snow courses as well as snow survey cabins, stimulated by the flooding of portions of Sacramento in late 1950 and the anticipated building of new large reservoirs to provide flood protection for downstream communities.

Following Fred Paget's untimely death while on a cabin stocking trip in 1950 Strauss took over the reins. He was not one to shy away from change and innovation, admittedly not all of which were successful. In the success column was the initiation of convening a meeting of agency participants in the cooperative program in 1954, which continues to this day with only one year exception. Fred even had his own Airborne Snow Observatory with photographs taken from light aircraft used to supplement the manual surveys.

Fred initiated an attempt at using helicopters to conduct manual snow surveys for the April, 1952 cycle in the Kern drainage, though there was no loss of life, the result recounted by Murt Stewart in Pat Armstrong's book *The Log of a Snow Survey* is quite hair raising. Fred was an active member of the Western Snow Conference, an organization dedicated to the art and practice of snow surveys in the western states and continued his participation in this organization throughout his career. He resigned from his position with snow surveys in 1954, perhaps hoping in vain to escape the 2nd El Farsantee award for the most egregious forecasting foopah. Fred was a bridge between the early pioneers of snow surveys and runoff forecasting and we current practitioners. He was always willing to discuss current and past events. His last attendance at a Western Snow Conference was in Seattle last year and fortunately his banquet presentation is at https://www.youtube.com/watch?v=_xuXg5AdhgA

On this month's cover are pictured the pioneers of snow surveys, seated Dr. Church and left to right F. T. Mayo, W. W. McLaughlin, Gov. George Clyde, George Lewis, Prof. Boardman, N.S. Hall and Fred Strauss